

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 12862549				
Frame : 225S/M Insulation class : F Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : N	Cooling method : IC411 - TEFC Mounting : B5T Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ² : 390 kg Moment of inertia (J) : 0.6733 kgm ²				
Output [kW]	45	45	45	45	
Poles	4	4	4	4	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	380/660	400/690	415	460	
Rated current [A]	86.4/49.7	84.1/48.8	83.1	73.4	
L. R. Amperes [A]	631/363	656/380	690	661	
LRC [A]	7.3	7.8	8.3	9.0	
No load current [A]	36.0/20.7	40.0/23.2	42.0	37.0	
Rated speed [RPM]	1482	1485	1485	1787	
Slip [%]	1.20	1.00	1.00	0.72	
Rated torque [Nm]	290	290	290	241	
Locked rotor torque [%]	250	280	300	350	
Breakdown torque [%]	280	310	340	380	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	16s (cold) 9s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	16s (cold) 9s (hot)	
Noise level ²	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	67.0 dB(A)	
Efficiency (%)	25%				
	50%	93.8	93.5	93.0	
	75%	94.0	94.1	94.1	
	100%	94.2	94.2	94.2	
Power Factor	25%				
	50%	0.70	0.65	0.62	
	75%	0.80	0.77	0.75	
	100%	0.84	0.82	0.80	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.0
	P2 (0,5;1,0)	5.0	5.0	5.0	4.3
	P3 (0,25;1,0)	5.0	5.0	5.0	4.2
	P4 (0,9;0,5)	2.8	2.8	2.8	2.4
	P5 (0,5;0,5)	1.9	1.9	1.9	1.6
	P6 (0,5;0,25)	1.2	1.2	1.2	1.1
	P7 (0,25;0,25)	0.9	0.9	0.9	0.7
Bearing type : <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3 Sealing : Oil Seal Oil Seal Lubrication interval : 14000 h 14000 h Lubricant amount : 27 g 27 g Lubricant type : Mobil Polyrex EM	Foundation loads Max. traction : 8360 N Max. compression : 12185 N				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.	These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.				
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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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